DOCKET NO.: NNI-0005 PATENT

**Application No.:** 10/672,833 **Office Action Dated:** May 15, 2007

## REMARKS

Claims 1-69 stand rejected. Claims 42 and 66 have been amended. No claims have been canceled or added. Therefore, claims 1-69 will remain pending in the present application.

Claim 29 was objected to as being dependent upon a rejected base claim, but was indicated as being allowable if rewritten in independent form. Applicant wishes to thank the Examiner for the indication that claim 29 includes allowable subject matter. Applicant respectfully requests consideration and allowance of the remaining claims.

Claim 42 stands rejected under 35 U.S.C. 112, second paragraph, allegedly as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, claim 42 was rejected for including the trademark/trade name "Kapton." (Office Action dated May 15, 2007 at p. 4). Also, the specification was objected to because of the use of "Kapton." Claims 42 and 66 have been amended to remove the phrase "Kapton" in order to overcome the rejection. No other uses of the word "Kapton" is found in the specification. Accordingly, applicant respectfully requests withdrawal of the rejection of claim 42 under 35 U.S.C. 112, second paragraph, as well as withdrawal of the objection to the specification.

Claims 7-19 and 54-60 stand rejected under 35 U.S.C. 112, first paragraph, allegedly as failing to comply with the enablement requirement. In particular, the office action suggests that the "disposal mechanism . . . was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention." (*Office Action dated May 15, 2007 at p. 3-4*). Similarly, the drawings are objected to under 37 CFR 1.83(a) for not showing the disposal mechanism. With all due respect to the contentions in the office action, applicants respectfully disagree.

The disposal mechanism is described in detail in the specification, and particularly at paragraph [0034] of the present specification. In particular, the present specification describes that "[f]lexible circuit pad 106 also may include electrical or physical disposal mechanisms that require a new flexible circuit pad to be used with each treatment." (*Specification* – paragraph [0034]). The present specification also notes an alternative

**DOCKET NO.:** NNI-0005 **Application No.:** 10/672,833 **Office Action Dated:** May 15, 2007

"disposal mechanism [that] may allow a certain flexible circuit pad a certain number of times and/or be used by a certain patient." (*Id.*). One of the stated purposes of such a disposal mechanism may be to "prohibit undesirable re-usage of the flexible circuit pad 106, and therefore facilitate sanitary usage of flexible circuit pad 106 both for an individual patient and across numerous patients." (*Id.*).

Therefore, the disposal mechanism is described in detail in the specification and the drawings as being included in the flexible circuit pad 106, for example. Accordingly, applicant respectfully requests withdrawal of claims 7-19 and 54-60 under 35 U.S.C. 112, first paragraph, as well as the objection to the drawings under 37 CFR 1.83(a).

Claims 1-43 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the office action alleges that claim 1 is indefinite because it does not "positively" claim "the magnetic stimulation device." (*Office Action dated May 15, 2007 at p. 4*). With all due respect to the contentions in the office action, applicant notes claims 1-43 are not indefinite under 35 U.S.C. 112, second paragraph.

In particular, claim 1 is directed to a circuit pad that comprises a conductor. The conductor reduces stimulation induced by a magnetic stimulation device. The claim does not require positive recitation of the magnetic stimulation device, because it is not a necessary element for the novelty of the claim. Instead, the circuit pad and the conductors operate on the magnetic fields created by the magnetic stimulation device.

Claims 1-28, 30, 35-41, 43-51, 53-63 and 67-69 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pub. No. 2004/0122281 to Fischell *et al.* ("Fischell"). In particular, the office action alleges that Fischell "discloses a circuit pad 10 having at least one conductor 18A located peripheral, and connected to, a magnetic stimulation device 15 (Fig. 3 and [0042])." (*Office Action dated May 15, 2007 at p. 5*). With all due respect to the contentions in the office action, applicant respectfully disagrees.

As shown throughout the present specification, and particularly with reference to Figure 1, a circuit pad 106 holds conductors 105. The conductors 105 eliminate or reduce undesirable effects of magnetic fields created by a magnetic stimulation device. (Specification – paragraph [0039]).

**DOCKET NO.:** NNI-0005 **Application No.:** 10/672,833 **Office Action Dated:** May 15, 2007

patient's depression.

More specifically, in an embodiment, a magnetic stimulation device may create magnetic fields to treat a patient. For example, the magnetic stimulation device may be used in transcranial magnetic stimulation (TMS) to create magnetic fields that treat a patient's depression. In these embodiments, the magnetic stimulation device is placed near the patients head to stimulate the patient's brain. Yet, these same magnetic fields that desirably treat the patient's depression, may also undesirably stimulate other portions of the patient. For example, the magnetic fields may also cause undesirable and painful stimulation of the patient's scalp. Obviously, such undesirable stimulation is not consistent with relieving the

The conductors 105 are used as part of the treatment procedure to reduce such undesirable stimulation of the scalp, while still allowing treatment of the patient's depression. The conductors 105 use various techniques to create conditions that allow the helpful magnetic fields to continue to reach the patient, but reduce the magnetic fields that cause the patient pain or discomfort. The flexible circuit pad 106 allows the conductors 105 to be manipulated during the treatment procedure to achieve the greatest effect.

For example, the flexible circuit pad 106 "may be made of a Mylar<sup>TM</sup>, polyester, or other polymer-type material that permits the pad and thus conductors 105 to fit the contours of the treatment area on the patient and/or to fit the contours of the magnetic stimulation device (*e.g.*, magnet with ferromagnetic core)." (*Specification – paragraph [0032]*). The flexible circuit pad 106 may also have other features that facilitate using the conductors 105 during the treatment process. For example, the "flexible circuit pad 106 also may have an adhesive material that permits the pad, and therefore conductors 105, to be affixed to a location in which system 100 is to operate. (*Specification – paragraph [0032]*). Also, flexible circuit pad 106 may have a conductive gel that facilitates conduction of electrical energy between conductors 105 and the treatment area." (*Specification – paragraph [0032]*).

In addition, the "[f]lexible circuit pad 106 may include a connector that permits components of system 100 (e.g., signal processor 104) to be readily attached and disconnected." (Specification – paragraph [0033]). Moreover, the "[f]lexible circuit pad 106 also may include electrical or physical disposal mechanisms that require a new flexible circuit pad to be used with each treatment." (Specification – paragraph [0034]).

**DOCKET NO.:** NNI-0005 **Application No.:** 10/672,833

Office Action Dated: May 15, 2007

Fischell does not teach or even suggest such a circuit pad. The office action cites Fischell's element 10 as teaching a circuit pad. However, with all due respect to the contentions in the office action, Fischell's element 10 is a "magnetic depolarizer 10." (Fischell – paragraph [0039]). Fischell's magnetic depolarizer 10 "provide[s] a high intensity magnetic field pulse (or train of pulses) for stimulation of the brain or for stimulation of the trigeminal nerve." (Fischell – paragraph [0039]). In other words, Fischell's magnetic depolarizer 10 is a type of magnetic stimulation device that creates the desirable magnetic field. It is not the conductor 105 to reduces undesirable magnetic fields, and certainly is not the flexible circuit pad 106 that holds such conductors.

Accordingly, with all due respect to the contentions in the office action, applicant respectfully requests withdrawal of the rejection of claims 1-28, 30, 35-41, 43-51, 53-63 and 67-69 under 35 U.S.C. 102(e) over Fischell.

Also, claims 31-34, 42, 52 and 64-66 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fischell in view of U.S. Patent No. 6,477,410 to Henley et al. ("Henley").

For the same reasons discussed above with respect to the rejection of claims 1-28, 30, 35-41, 43-51, 53-63 and 67-69 under 35 U.S.C. 102(e) over Fischell, applicant respectfully requests withdrawal of the rejection of claims 31-34, 42, 52 and 64-66 under 35 U.S.C. 103(a) over Henley.

Finally, this response is filed with an attached form PTO-1449, citing various prosecution documents and art cited in related patent applications. Despite applicant's repeated attempts to have the same examiner examine this case and these related cases, it appears that these applications will continue to be prosecuted under different examination. Accordingly, applicant respectfully requests consideration of the cited documents.

**DOCKET NO.:** NNI-0005 **PATENT** 

**Application No.:** 10/672,833

Office Action Dated: May 15, 2007

## Conclusion

In view of the foregoing, applicant respectfully submits that the claims are allowable and that the present application is in condition for allowance. Reconsideration of the application and an early Notice of Allowance are respectfully requested. In the event that the Examiner cannot allow the present application for any reason, the Examiner is encouraged to contact the undersigned attorney, Vincent J. Roccia at (215) 564-8946, to discuss resolution of any remaining issues.

Date: November 14, 2007

/Vincent J. Roccia/ Vincent J. Roccia Registration No. 43,887

Woodcock Washburn LLP Cira Centre 2929 Arch Street, 12th Floor Philadelphia, PA 19104-2891 Telephone: (215) 568-3100

Facsimile: (215) 568-3439